TAIKO Service Manual

Chapter 2

Specifications

2-1. Specifications
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2-3. Pin Assignment
2-4. Interface Circuit
2-5. External Dimensions
2-6. Panel Cut Dimensions
2-7. DIP Switch Settings

Issue: 01/2007

2-1. Specifications

2-1-1. Basic Specifications

Acceptable Bankenote	Length: 120 mm to 160 mm Width: 62 mm to 82 mm
Insertion Direction *1	4-way
Accepting Rate *1	95% or higher
Validation Method	Optical, 4 wavelengths, transparency and reflection
Anti-Fishing Mechanism	Lever and optical sensor combination
Interface *2	ccTalk/SERIAL(ID-003)/MDB/PULSE
Escrow	1 banknote
LED *2	LED lamp (upper potion of faceplate) Full-color lightning (gradation/solid)

*1 May differ depending on the software for your country. For details, refer to the Software Information Sheet.

*2 Can be selected using the DIP switches. See=> 2-7. DIP Switch Setting

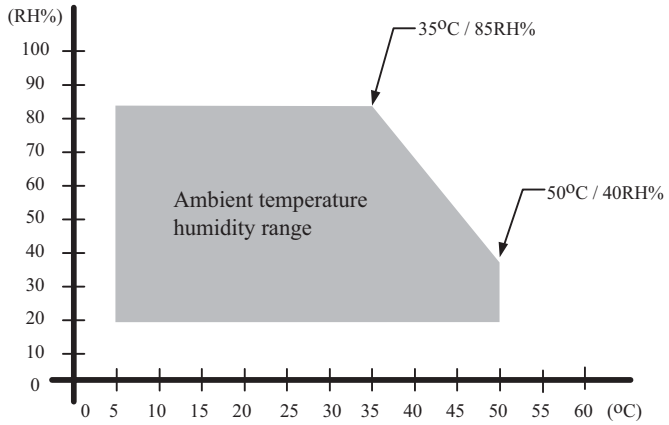
2-1-2. Electrical Specifications

Power Supply Voltage	12V DC ±5 %
Rated Power Consumption	Standby: Approx. 0.1 A Operation: Approx. 0.5 A Max: Approx. 1.4 A (Max. 300 ms)

2-1-3. Environmental Specifications

Operation Temperature *1	5°C to 50°C
Storage Temperature	-20°C to 60°C
Operation Humidity *1	20%RH to 85%RH (No condensation)
Storage Humidity	20%RH to 85%RH (No condensation)
Light Disturbande	Avoid direct sunlight Interior lighting must be incandescent lamp Angle: 15 dgrees or more Illumination: 3000 Lx or less
Installation	For indoor use only

*1 The overall operation temperature and humidity range is as follows.



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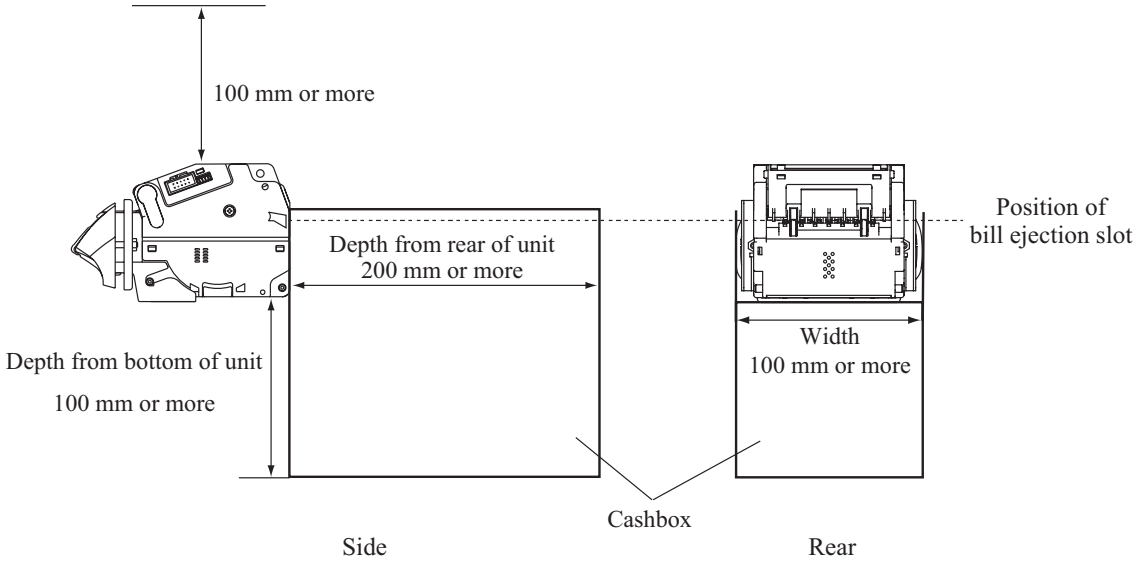
2-1-4. Installation Specifications

Installation *1	Door holizontal mounting (No vibration)
Weight	Approx. 0.6 kg
External Dimentions	124 mm (W) x 88 mm (H) x 145.2 mm (D)
Cahsbox *2	Supplied by the customer

*1 Allow 100 mm above the unit to open the lid for removal of the unit from the faceplate.

*2 The cashbox must be 100 mm or more in depth from the bottom of the TAIKO unit, 200 mm or more in depth from the rear of the unit and 100 mm or more in width. Both sides of the cashbox must be higher than the position of the bill ejection slot.



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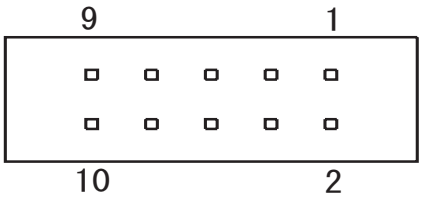
2-2. Connector

The following diagram is the interface connector as viewed from the acceptor side or from a relay board.

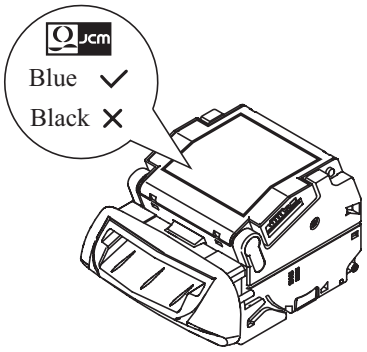


Box Type Plug XG4C-1034 (Omron)

- **If a relay board is attached to the TAIKO unit, do not attempt to remove it.**

2-3. Pin Assignment

- **The following pin assignment is for TAIKO units with a blue JCM logo label. If the logois black, the pin assignment may differ. For details, contact JCM.**



2-3-1. ccTalk Interface

Pin No.	Signal Name	I/O *1	Function
1	ccTalk+	IN/OUT	ccTalk Send/Receive Line
2	NC		Not Connected
3	NC		Not Connected
4	NC		Not Connected
5	NC		Not Connected
6	NC		Not Connected
7	Vcc		12V DC Power Supply
8	Vss		Power Supply GND
9	NC		Not Connected
10	NC		Not Connected

*1 Conditions for the I/O (Input/Output) column are from the Bill Acceptor side.

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2-3-2. SERIAL(ID-003)/MDB Interface

Pin No.	Signal Name	I/O *1	Function
1	NC	-	Not Connected
2	NC	-	Not Connected
3	RXD-	IN	Data Transmission Line (Active when the current is applied)
4	RXD+		
5	TXD-	OUT	Data Reception Line (Active when the current is applied)
6	TXD+		
7	Vcc	-	12V DC Power Supply
8	Vss	-	Power Supply GND
9	NC	-	Not Connected
10	NC	-	Not Connected

*1 Conditions for the I/O (Input/Output) column are from the Bill Acceptor side.

2-3-3. PULSE Interface

Pin No.	Signal Name	I/O *1	Function
1	NC	-	Not Connected
2	NC	-	Not Connected
3	Enable/Disable (-)	In	Enable/Disable Signal Input Line (Enable when the current is applied. Disable when the current is NOT applied.)
4	Enable/Disable (+)		
5	Vend(-)	Out	PULSE Signal Output Line (Active when the current is applied.)
6	Vend(+)		
7	Vcc	-	12V DC Power Supply
8	Vss	-	Power Supply GND
9	NC	-	Not Connected
10	NC	-	Not Connected

*1 Conditions for the I/O (Input/Output) column are from the Bill Acceptor side.

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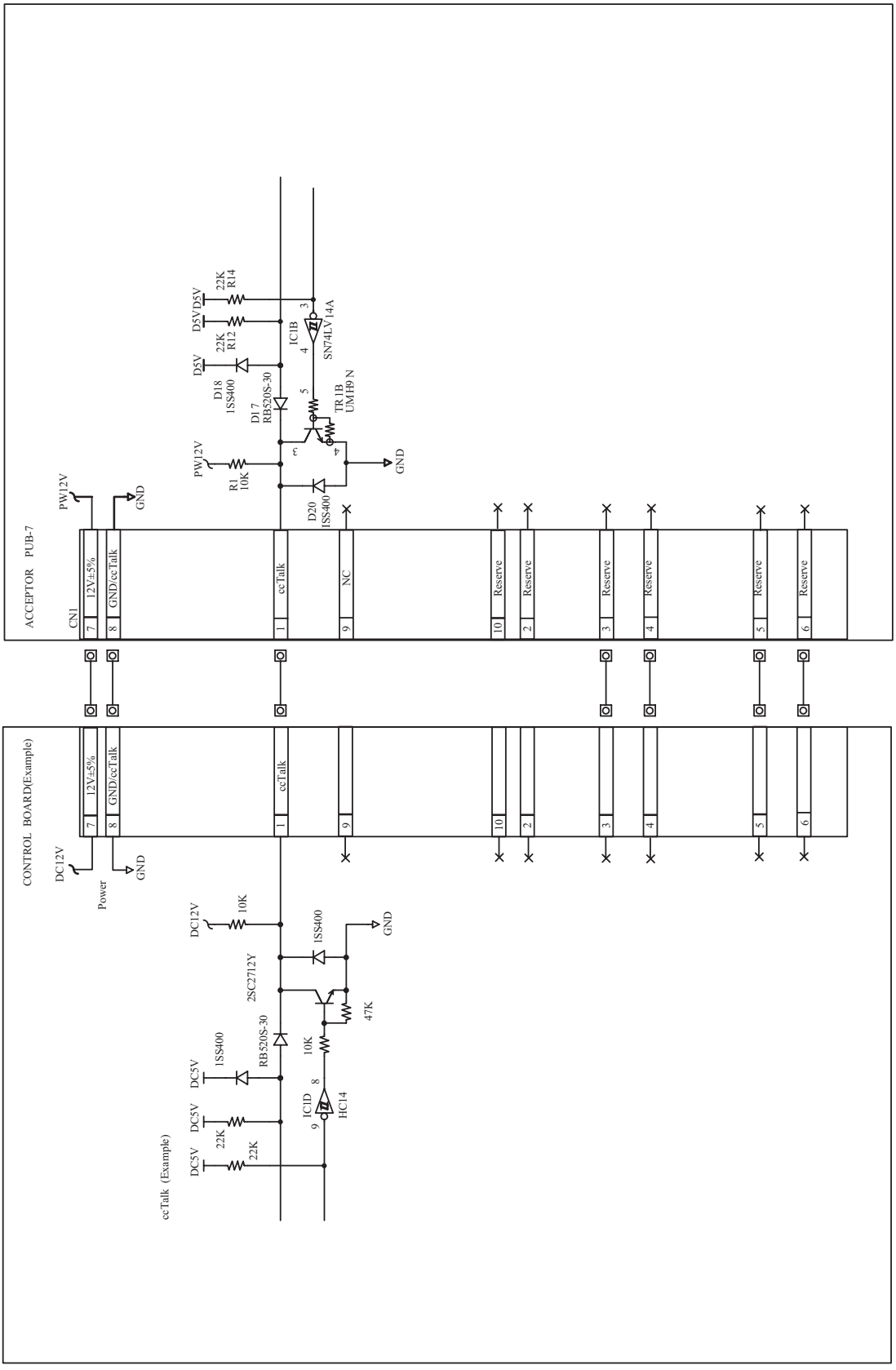
2-4. Interface Circuit

2-4-1. ccTalk Interface Circuit



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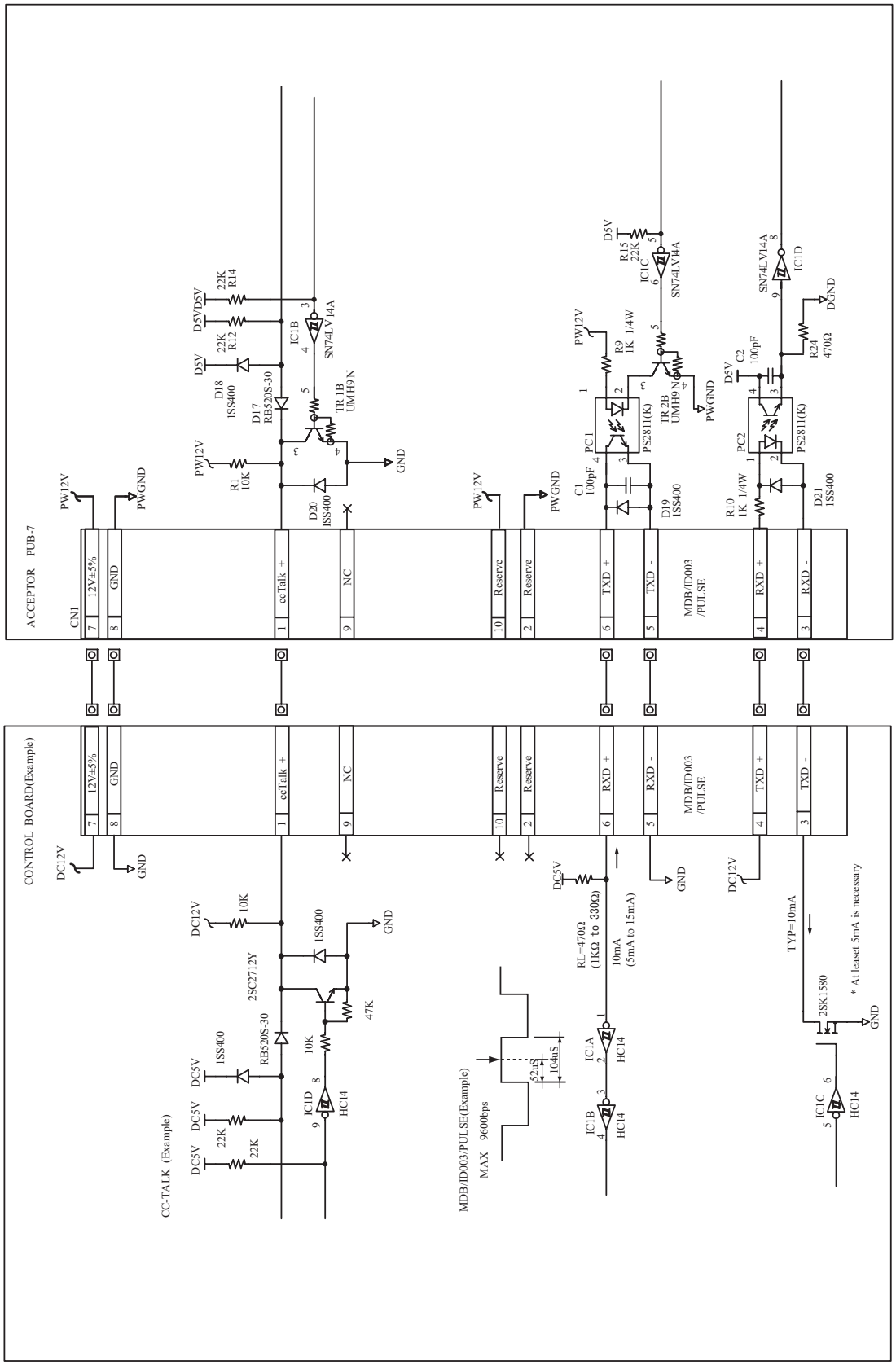
2-4-2. SERIAL(ID-003)/MDB Interface Circuit



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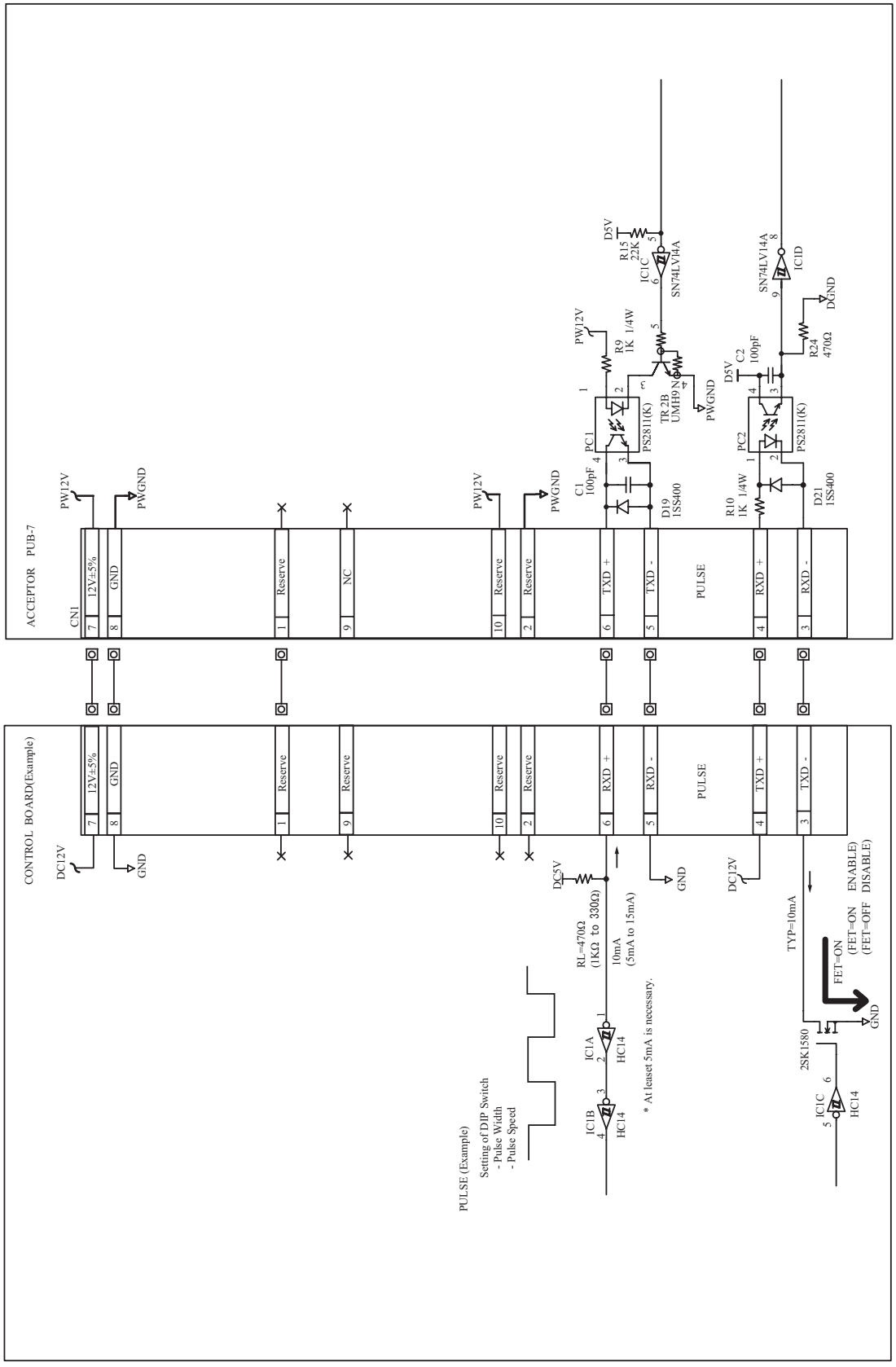
2-4-3. PULSE Interface Circuit



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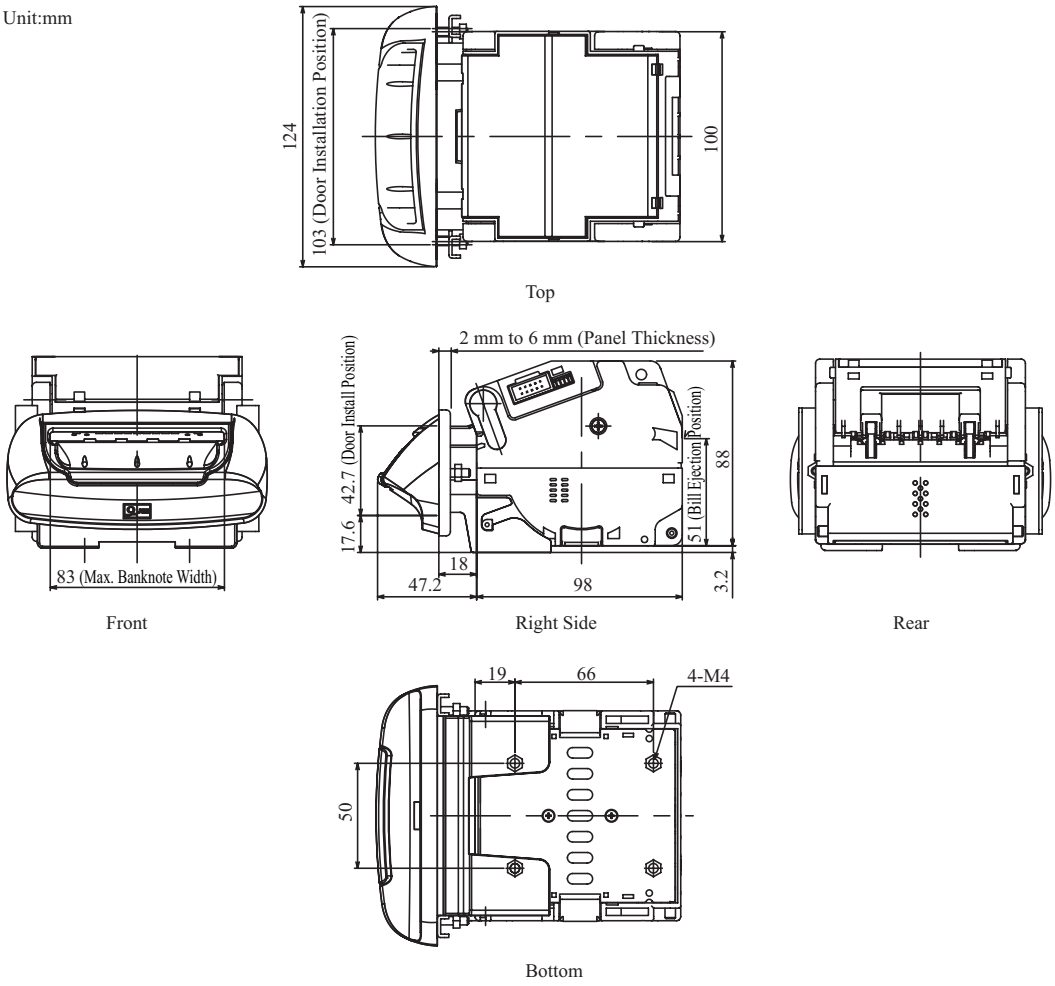
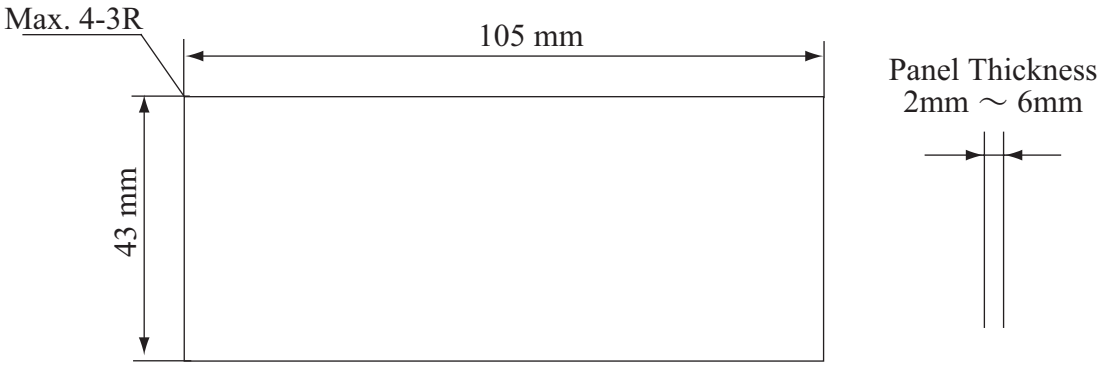
2-5. External Dimensions

Unit:mm



2-6. Panel Cut Dimensions



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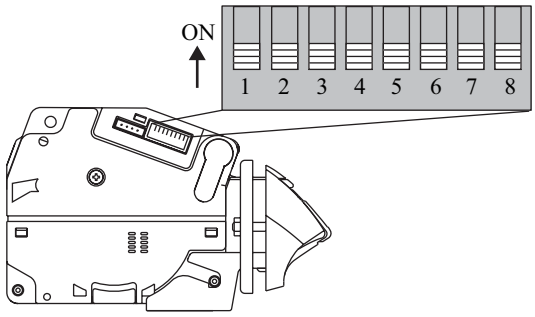
2-7. DIP Switch Settings

The communication method and various functions of the TAIKO unit can be set with the DIP switches on the left side of the unit.



Left Side

2-7-1. Basic Settings

SW#	Setting Item	
	ON	OFF
1	Test Mode *1	Normal Mode
2	Double-Scan Mode *2	Normal Scan Mode
3	Reserved	
4	Five (5) drum cycles (fishing prevention) *3	Normal Operation
5	Refer to the Software Specifications	
6 7 8	See table below	

6	7	8	I/F Setting
OFF	OFF	OFF	SERIAL (ID-003)
ON	OFF	OFF	MDB
OFF	ON	OFF	ccTalk (Non Encrypted)
ON	ON	OFF	ccTalk (Encrypted) *4
-	-	ON	PULSE *5

*1 For details about the Test Mode, refer to 5-2-2. Test Mode.

*2 The acceptance rate will be improved but operation time will be increased if a banknote is rejected.

*3 Fishing prevention will be improved but operation time will be increased.

*4 If the encryption code become unclear, refer to 2-7-5. Encryption Code Initializing Setting Mode to initialize the encryption code.

*5 For Details about Communication Setting, refer to the Software Information Sheet.

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2-7-2. Special Settings

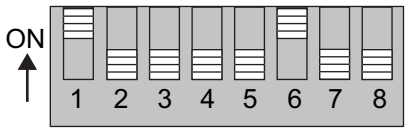
Setting Items		SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
Denomination Setting Mode	Accept Setting	**ON**	OFF	OFF	OFF	OFF	**ON**	OFF	OFF
	Inhibit Setting	**ON**	OFF	OFF	OFF	OFF	**ON**	**ON**	OFF
LED Pattern Setting Mode	Define Pattern 1	**ON**	**ON**	OFF	OFF	OFF	OFF	**ON**	OFF
	Define Pattern 2	**ON**	OFF	**ON**	OFF	OFF	OFF	**ON**	OFF
Encryption Code Initializing Setting Mode		**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	OFF	OFF
Download Mode *1		**ON**	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**
Adjustment Mode *1		**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	**ON**

*1 For details about Software Download and Adjustment, refer to Chapter 4 Download/Adjustment.

■ Denomination Setting Mode

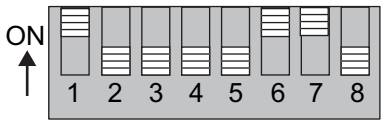
Perform the accept/inhibit setting for the banknote denomination based on the software for your country. The default settings are to accept all denominations.

◆ Accept Setting



To perform the accept setting, set DIP switch Nos.1 and 6 to ON and then turn on the power to the TAIKO unit. After the LED flashes white, set DIP switch No.1 to OFF to enter the setting mode. Insert the denomination of banknote that you want accepted into the insertion slot. The setting is registered if the LED remains lit light blue and the banknote is returned. Insert the next denomination of banknote that you want accepted.

◆ Inhibit Setting



To perform the inhibit setting, set DIP switch Nos.1, 6 and 7 to ON and then turn on the power to the TAIKO unit. After the LED flashes white, set DIP switch No.1 to OFF to enter the setting mode. Insert the denomination of banknote that you want inhibit into the insertion slot. The setting is registered if the LED remains lit orange and the banknote is returned. Insert the next denomination of banknote that you want inhibited.

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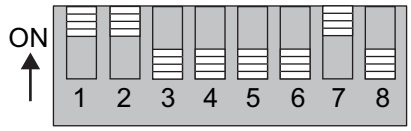
- The accept/reject setting for banknote denominations can be confirmed with the LED lamp. After the initial operation is performed, the LED will flash a number of times equal to the total number of banknote denominations. Blue indicates an accept setting and red means a reject setting.
  Example: If 5, 10 and 20 euro notes are set to be accepted and 50 and 100 euro notes to be rejected, the LED will flash the corresponding 5 times as follows: blue, blue, blue, red and red.

■ LED Pattern Setting Mode

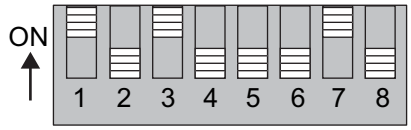
The LED pattern can be changed according to your perference. Select between pattern 1 and pattern 2. The default setting is pattern 1.

◆ Define Pattern 1



Set DIP switch Nos.1, 2 and 7 to ON and then turn on the power to the TAIKO unit. Set DIP switch No.1 to OFF to set the LED pattern to pattern 1.

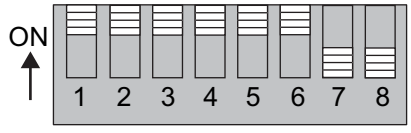
◆ Dfine Pattern 2



Set DIP switch Nos.1, 3 and 7 to ON and then turn on the power to the TAIKO unit. Set DIP switch No.1 to OFF to set the LED pattern to pattern 2.

■ Encryption Code Initializing Setting Mode

When using ccTalk Communication (Encryption) Mode and the encryption code is unknown, perform the Encryption Code Initializing Setting to initialize the Encryption Code to the last 6 digits of the TAIKO serial number.



Set DIP switch Nos. 1 to 6 to ON (Set DIP switch Nos. 7 and 8 to OFF) and then supply the power to the TAIKO unit. Set DIP switch No. 1 to OFF to initialize the encryption code.

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